

What is Claimed is:

1        1. A polarizer, comprising:

2              a quartz substrate part comprising a plurality of quartz substrate stacked on top of  
3              one another; and

4              a polarizer holder supporting the quartz substrate part.

1        ~~1~~ A polarizer, comprising:

2              a plurality of quartz substrate parts, each quartz substrate part including one or  
3              more quartz substrates; and

4              a polarizer holder supporting said plurality of quartz substrate parts.

1        ~~2~~ <sup>1</sup> 3. The polarizer according to claim ~~2~~<sup>1</sup>, wherein the quartz substrate part has a  
2              rectangular structure.

1        ~~3~~ <sup>1</sup> 4. The polarizer according to claim ~~2~~<sup>1</sup>, wherein the quartz substrate part has triangular  
2              structure.

1        ~~4~~ <sup>1</sup> 5. The polarizer according to claim ~~2~~<sup>1</sup>, wherein the quartz substrate part has a  
2              parallelogram structure.

1        ~~6.~~ The polarizer according to claim 2, wherein the polarizer holder has a lattice-like  
2              structure.

1        5. The polarizer according to claim 2, wherein the quartz substrate part comprises a  
2        plurality of quartz substrates stacked on top of one another.

1        6. The polarizer according to claim 2, wherein the polarizer holder includes an  
2        optically absorptive material.

1           7. The polarizer according to claim 2, wherein each of said plurality of quartz  
2         substrate parts is placed at a non-zero angle relative to a normal line of the surface of the  
3         polarizer holder.

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15        9 11. A polarizer system, comprising:

2              a light source for generating a light;

3              a quartz substrate part comprising a plurality of quartz substrates stacked on top of

4              one another; and

5              means for directing said light onto said quartz substrate part.

1      10 12. A polarizer system, comprising:  
2            a light source for generating a light;  
3            a plurality of quartz substrate parts, each quartz substrate part including one or  
4            more quartz substrates;  
5            a polarizer holder supporting said plurality of quartz substrate parts; and  
6            means for directing said light onto said plurality of quartz substrate parts.

1      11 13. The polarizer system according to claim 12, wherein the quartz substrate part has  
2            a rectangular structure.

1      12 14. The polarizer system according to claim 12, wherein the quartz substrate part has  
2            a triangular structure.

1      13 15. The polarizer system according to claim 12, wherein the quartz substrate part has  
2            a parallelogram structure.

1      16. The polarizer system according to claim 12, wherein the polarizer holder has a  
2            lattice-like structure.

1      14 17. The polarizer system according to claim 12, wherein each quartz substrate part  
2            comprises a plurality of quartz substrates stacked on top of one another.

1      ~~16~~ 18.      The polarizer system according to claim ~~12~~<sup>10</sup>, wherein said means for directing said  
2      light collimates said light.

1      ~~17~~ 19.      The polarizer system according to claim ~~12~~<sup>10</sup>, wherein said means for directing said  
2      light collimates said light and the quartz substrate part partially polarizes said collimated light.

1      ~~18~~ 20.      The polarizer system according to claim ~~12~~<sup>10</sup>, wherein each of said plurality of  
2      quartz substrate parts is placed at a non-zero angle relative to a normal line of the surface of the  
3      polarizer holder.

1      ~~19~~ 21.      The polarizer system according to claim ~~12~~<sup>10</sup>, wherein each of said plurality of  
2      quartz substrate part is placed at the Brewster's angle relative to a normal line of the surface of  
3      the polarizer holder.

1      ~~20~~ 22.      The polarizer system according to claim ~~12~~<sup>10</sup>,  
2      wherein the polarizer holder includes an optically absorptive material.

1      ~~15~~ 23.      The polarizer system according to claim ~~17~~<sup>14</sup>,  
2      wherein each quartz substrate part includes means for partially polarizing said  
3      light, and wherein the degree of partial polarization depends on the number of said quartz  
4      substrates stacked on top of one another.

1           24. A polarizer system comprising:

2                 a light source for generating a light ;  
3                 a plurality of quartz substrate parts, each quartz substrate part having one or more  
4                 quartz substrates;  
5                 a polarizer holder supporting said plurality of quartz substrate parts;  
6                 means for directing said light onto said plurality of quartz substrate parts;  
7                 a moving control part coupled to and moving the polarizer holder to uniformly  
8                 irradiate an area underneath said plurality of quartz substrate parts and said polarizer holder.

1           25. The polarizer system according to claim 24,

2                 wherein the moving control part includes means for oscillating the polarizer  
3                 holder.

1           26. The polarizer system according to claim 24,

2                 wherein the moving control part includes:  
3                 a first moving control part moving the polarizer holder in a first direction parallel  
4                 to the surface of the polarizer holder; and  
5                 a second moving control part moving the large scale polarizer in a second  
6                 direction parallel to the surface of the polarizer holder and perpendicular to the first direction.

1           27. A polarizer system, comprising:

2           a light source for generating a light;

3           a lens for collimating said light;

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4/11/83   one or more sets of plurality of quartz substrate parts, each quartz substrate part

6           having one or more quartz substrates; and

7           one or more polarizer holders supporting respective one or more sets of plurality

8           of quartz substrate parts, wherein zero or more of said one or more polarizer holders are placed

9           between the light source and the lens, and wherein zero or more of said one ore more polarizer

holders are placed after the lens.

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